



## King's Research Portal

DOI:

[10.1080/01425692.2016.1202747](https://doi.org/10.1080/01425692.2016.1202747)

*Document Version*

Peer reviewed version

[Link to publication record in King's Research Portal](#)

*Citation for published version (APA):*

McGimpsey, I., Bradbury, A., & Santori, D. (2017). Revisions to rationality: the translation of 'new knowledges' into policy under the Coalition Government. *British Journal of Sociology of Education*, 38(6), 908-925. <https://doi.org/10.1080/01425692.2016.1202747>

### **Citing this paper**

Please note that where the full-text provided on King's Research Portal is the Author Accepted Manuscript or Post-Print version this may differ from the final Published version. If citing, it is advised that you check and use the publisher's definitive version for pagination, volume/issue, and date of publication details. And where the final published version is provided on the Research Portal, if citing you are again advised to check the publisher's website for any subsequent corrections.

### **General rights**

Copyright and moral rights for the publications made accessible in the Research Portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognize and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the Research Portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the Research Portal

### **Take down policy**

If you believe that this document breaches copyright please contact [librarypure@kcl.ac.uk](mailto:librarypure@kcl.ac.uk) providing details, and we will remove access to the work immediately and investigate your claim.

To cite this article: Ian McGimpsey, Alice Bradbury & Diego Santori (2017) Revisions to rationality: the translation of 'new knowledges' into policy under the Coalition Government, *British Journal of Sociology of Education*, 38:6, 908-925, DOI: 10.1080/01425692.2016.1202747  
To link to this article: <https://doi.org/10.1080/01425692.2016.1202747>  
Published online: 04 Jul 2016.

## Revisions to rationality: the translation of 'new knowledges' into policy under the Coalition Government

Ian McGimpsey<sup>a</sup>, Alice Bradbury<sup>b</sup> and Diego Santori<sup>c</sup>

<sup>a</sup>Department of Education and Social Justice, University of Birmingham, Birmingham, UK; <sup>b</sup>UCL Institute of Education, University College London, London, UK; <sup>c</sup>School of Education, University of Roehampton, London, UK

### ABSTRACT

This article gives an account of the use of knowledges from emerging scientific fields in education and youth policy making under the Coalition government (2010–15) in the UK. We identify a common process of 'translation' and offer three illustrations of policy-making in the UK that utilise diverse knowledges produced in academic fields (neuroscience, network theory and well-being). This production of 'new knowledges' in policy contexts allows for the identification of sites of policy intervention. This process of translation underlies a series of diverse revisions of the rational subject of policy. Collectively, these revisions amount to a change in policy-making and the emergence of a different subject of neoliberal policy. This subject is not an excluded alterity to an included rational subject of neoliberalism, but a 'plastic subject' characterised by its multiplicity. The plastic subject does not contradict the rational subject as central to neoliberal policy-making, but diversifies it.

### KEYWORDS

Rationality; networks; neuroscience; well-being; neoliberalism

### Introduction

This paper explores the use of knowledge from emerging scientific fields in education and youth policy with a focus on the period of the Conservative–Liberal Democrat Coalition government in the UK (2010–2015), and the relation of these 'translations' to the representation of the subject of policy as rational. We argue that, in combination with the use of behavioural economics in policy discourse, this amounts to a revision of the rational subject of policy, one of the core tenets of liberalism including neoliberalism. This paper develops ideas from our previous work (Bradbury, McGimpsey, and Santori 2013) by illustrating a further series of translations of knowledge from emerging scientific fields into policy making and arguing that cumulatively they effect a qualitative change to the subject as a site of regulatory intervention. Ultimately, we suggest that this is a discursive shift that functions as a means of sustaining a neoliberal policy regime in education.

This discussion is set in the UK political context of 2015, following the election of a Conservative administration and looking back on five years of Conservative–Liberal Democrat Coalition Government. During this period market-based concepts held a contradictory place in policy making. The UK government broke the state's monopoly over the supply of schooling through an acceleration of the diversification of suppliers and types of school (DfE 2013) while our illustrations demonstrate a simultaneous increase in prescription. This 'hybrid model' of centrally directed policy implementation and more networked and devolved modes of 'policy realisation' (Grek 2013, 859–861) poses questions about the resilience of the rational choosing subject – a central figure in policy-making – within large-scale systems of choosing such as school selection. Such questions are central to the reconfiguration of neoliberal policy-making following the financial crisis, and to attempts to resolve the contradictions within neoliberal political economy that this crisis exposed. The purpose of this article is to consider the implications of such 'late neoliberal' (McGimpsey 2016) policy making with respect to representations of the subject of policy in education and youth policy.

Below we offer a short series of illustrations of the translation of new knowledges in education and youth policy that draw on neuroscience, concepts of well-being, and network theory. These illustrations by no means represent the extent of incorporation of knowledges from emerging scientific fields in policy, but are used to explore the processes by which new knowledges work within and are worked by policy-making processes.

### The translation of new knowledges

Education policy sociological work has taken up post-structural notions of intertextuality and recontextualisation, notably through influential notions of the 'policy cycle' whereby policy is understood to be produced and productive multiply and iteratively in non-linear processes across contexts of influence, text production and practice (Bowe, Ball, and Gold 1992). Recent policy-based research has examined such recontextualising processes within contexts of practice through the notion of 'enactment' (Maguire, Ball, and Braun 2010; Bradbury 2011, 2013, Ball et al. 2011; Braun, Maguire, and Ball 2010) or across national territories in transnational processes of policy borrowing (Cromby and Willis 2014; Ishkanian 2014). 'Translation' as we use it here operates with these broader post-structural assumptions of education policy sociological research in mind, but is focused on the shifting relations of knowledge to policy whereby emerging scientific knowledges and policy production are 'fused' (Riddell 2013), in processes that have inevitable implications for the representation of the subject of policy within policy discourse. Again, working with the established terms of post-structural policy analysis, the significance of such a change is that it is not simply discursive, but will have effects on the constitution of the subjects named by and represented within policy (Ball 2006b; Youdell 2006). We use the term 'new knowledges' here specifically to refer to formations within the field of policy making (we might have said 'new policy knowledges' were it not so cumbersome). These new knowledges are comprised of articulated sets of concepts and 'facts', typically originating (or seemingly originating) in named fields of academic work, and that are circulated in contexts of policy influence and policy production (Ball 2006a, 51; Bowe, Ball, and Gold 1992) by means of networked think tank researchers and academic gurus, and highly consumable reports, books, speeches and so on. These knowledges are often presented as entirely new, very credible, homogenous in their conclusions, and disruptive of existing ideas within policy-making, while simultaneously being circulations by which policy network membership is established and maintained. The establishment of these sets of ideas in policy making as both 'new' and as 'knowledges' is part of our concern here, particularly in relation to the purpose this novelty and credibility serves within the policy-making arena.

The emerging scientific knowledges that have been subject to successful translations in late neoliberal policy making are further notable in that they challenge the 'rational subject' as a central element in neoliberal political discourse. Neoliberal modes of policy making have been characterised by a particular productive relation of the market to subjectivity such that subjects of neoliberalism must be produced as 'rational' (Olssen 1996, 340). In the phase of policy making that has followed the financial crisis, translations have served to diversify the productive force of policy discourse, enabling the address of alternative subjects such that the 'irrational' is no longer the excluded other of policy, but an object of the productivity of neoliberal policy (though clearly not the only object). That is, it is via these translations that 'within the neoliberal regime a new knowledge of the subject is being constituted, one that is of the limited effectiveness of neoliberal policy technologies in constituting subjects as rational' (Bradbury, McGimpsey, and Santori 2013, 250), with concomitant changes in the means and ends of governance.

Having previously argued for the constitution of such a new knowledge in an emerging hybrid field of psychology and economics, below we present three further illustrations of new knowledges and their use in policy, under the headings of neuroscience, wellbeing and network theory. Our approach to researching these formations and their functioning has taken the form of an analysis of documents produced by a wide range of governmental and non-governmental bodies, as well as academic and press comment on these developments. The variety of sources we draw on reflects our conception of new knowledges as formations that articulate within policy-making. Nevertheless, we preserve a particular focus in our analysis on the popular texts and think tank reports that in the UK policy context figure significantly in the work of translation from a field of typically academic knowledge production into contexts of policy influence and production. Each new knowledge illustrated has a basis in an academic

discipline which serves to legitimise policy claims; however in 'translation' into policy, claims tend to become narrower, and more singular, definitive and generalised than those of their antecedent academic field.

As a result, the links between the ideas used in policy implementation and academic research vary. In the case of neuroscience, for example, there is tension between some academic neuroscientists and the way in which evidence is used in policy. In the case of behavioural economics, we see a key popular text, 'Nudge' (Thaler and Sunstein 2009), serving as a synthesis (or perhaps shorthand) for a body of knowledge, with several peripheral texts reinforcing this main text's message. Accompanying such a text is often a prominent 'guru', who has come to embody the new knowledge and may be involved in policy bodies. The positioning of Richard Thaler within the UK government's Behavioural Insight Unit (recently reconstituted as an independent social enterprise) is a good example of this. In other knowledges a group of academics or a research centre may fulfil this 'guru function', as a highly consumable object that seems to encapsulate the knowledge. Our analysis is an attempt to follow these processes of translation<sup>2</sup>, as academic debates and knowledge production are recontextualised and rearticulated into policy possibilities and principles that can be represented in policy texts and to public audiences in the mainstream press.

To say 'we attempt to follow a process of translation' does not imply a conception of translation as a unidirectional, linear process. Translations involve, for example, the establishment of government bodies or government-funded university research centres that seek to promote policy oriented research within the academic field (Burgess 2012). In a higher education environment where funding and prestige is linked to 'impact', there is undeniably a reciprocal relationship between the academic and policy worlds, with researchers' careers and status elevated by the translation of their work into policy tools, and a resulting continuation of research in similar areas. Academic research may legitimise policy claims, but government funding and policy take-up legitimises academic research. There are often returns of the new knowledge to its 'roots' in an academic field.

We are further concerned, as noted above, to continue to explore the relationship of new knowledges to the subjects of policy. How do these new knowledges result in policy addressing a different subject/the subject differently, and constituting different sites and modes of regulatory intervention? That is, through the three illustrations below we seek to argue that different knowledges in their translation into policy tend to delineate different objects, sites and means of policy intervention. Our focus is not on the scientific disciplines themselves, or on a critique of the validity of policy representations of the achievements of these fields.

## Neuroscience

In this first illustration, we examine the translation of ideas from neuroscience into policy-making, with a specific focus on its use in early intervention policies with children under 5 years. Neuroscience has been described as the great scientific development of our time, the revelations of which will affect numerous aspects of our lives. It encompasses numerous fields of inquiry into the brain and nervous system from neurology, psychology, pharmacology, physiology, anatomy, molecular biology (Rose and Rose 2012, 251). Though not new, its recent prominence is often related to scientific breakthroughs enabled by technological advances in genomics and informatics and new imaging techniques which have allowed the brain to be modelled (Goswami 2006; OECD 2008; Rose and Rose 2012, 252).

Given the extraordinary scientific and cultural influence of neuroscience, it is unsurprising that there is an existing literature concerning its often problematic translation into policy (Goswami 2006; OECD 2008; Rose and Rose 2012). Further, neuroscience has flourished in professional contexts of practice, such as in education, with 'brain gym' a prominent example of the implementation of 'insights' into the classroom, or what Goswami refers to as 'the widespread misapplication of science to education' (2006, 2). The practice-based use (or abuse) of neuroscience is, as we have noted, not our main concern here. However, this background is relevant to the extent that the prominence of neuroscience in popular culture and professional contexts is arguably a contributory factor in the establishment of neuroscience as a sound basis for policy decisions.

To illustrate the impact of neuroscience on policy we focus on the early years sector, and specifically early intervention policy.

### Early intervention

The early years sector (relating to services for children from birth to five years) has been subject to intense policy development throughout the 2000s and 2010s, in which neuroscience has had a significant influence. As with all 'new knowledges', there are echoes of past theories, which offer legitimacy and familiarity. Neuroscientific explanations relating to the appropriate development of children's brains have been used in policies on childcare, health and social care provision, both within and alongside a dominant overarching discourse of human development as a scientifically observable phenomenon (Blaise 2005; Dahlberg and Moss 2005; Yelland 2008). The discourse of 'developmentally appropriate practice' has been enlivened by the use of 'insights' from neuroscience, which have provided reassurance and credibility to this modernist perspective of children's progress through developmental milestones. Moreover, neuroscience has recently been deployed explicitly in discussions of early intervention in children's lives to prevent future problems. There are three dimensions of this adoption of neuroscience which are of interest in our analysis: the constitution of the family and the family environment as a key site of policy intervention; the constitution of the neurologically damaged child as a policy problem; and the justification of spending on early intervention as a preventative measure based on principles of economic efficiency.

Firstly, in discussions of early intervention, neuroscience is used to make links between environment and educational attainment, through which the family is constructed as a site of policy intervention. This link is prominently made in reports from the Centre for Social Justice (CSJ), a think tank founded by the former Conservative leader and, at the time of writing, Secretary of State for Work and Pensions Iain Duncan-Smith. A 2011 report on educational exclusion made explicit links between children's experiences in their early years, their brain development, and subsequent exclusion from school:

The quality of a child's primary caregiver's support and nurture profoundly influences a child's very early formative years. Their first three years are critical in terms of the brain's social, emotional and physical development. Trauma affects the brain's development and in turn a child's behaviour and learning ability. (CSJ 2011, 14–15)

This notion of a 'critical period' of brain development in the early years of a child's life – for example, CSJ reports include the 'fact' that 'a newborn's brain is quarter the size of an adult's, whereas by age three, it is 80 per cent formed' (CSJ 2011, 56) – establishes the idea that children who have been fundamentally altered by their early experiences face educational exclusion. Quotes such as these demonstrate how it becomes possible to directly correlate 'trauma' to 'learning ability' and future outcomes of social and economic exclusion; a correlation which in turn is used to justify early intervention in children's lives by state agencies. In another earlier CSJ report, published with the Smith Institute, this link between educational attainment and 'trauma' is emphasised:

[C]hildren exposed to chronic and unpredictable stress – a parent who lashes out in fury; an alcoholic who is kind one day and abusive the next – will suffer deficits in their ability to learn. As a result, their IQs will be lower; in itself, a risk factor for conduct problems. (Allen and Duncan Smith 2008, 60)

By representing a biological internalisation of a 'bad' family environment manifesting as diminished neurological capacity with respect social and emotional development and intelligence, such discussions i) locate the problem of educational exclusion (and other associated social problems) within the child whose brain has been affected by the 'quality' of the nurture received, and ii) constitute parents' practices of care during the first three years of the child's life as a causative factor in future outcomes. Thus, not only is the neurologically-defined child figured as a policy problem, but neuroscience is used in the formation of a justificatory narrative for 'early intervention' in the family environment to prevent such supposedly irreparable damage.

The idea that much is decided in the brain by the age of three (identified in an OECD report; 2008 as a popular ‘neuromyth’), was repeated in reports produced by the Early Intervention Review Team under the Coalition government, which commented that in the first three years, ‘neglect, the wrong type of parenting and other adverse experiences can have a profound effect on how children are emotionally “wired”’ (Allen 2011b, 14). This tendency to see behaviour as determined by the brain is referred to by Rose and Rose as ‘neuroessentialism’; here in their discussion of children with Attention Deficit Hyperactivity Disorder:

The child’s behaviour is no longer perceived as part of a relationship – between him [ ... ] and his school or parents – but as rooted in his brain [ ... ] neuroessentialism maintains that behavioural outcomes are embedded in brain processes (Rose and Rose 2012, 270–271)

This neuroessentialist approach (which as Nikolas Rose separately points out is far from the only neuroscientific conception of the brain (Rose 2013)), in constructing the neurologically damaged and so determined child as a policy problem, repositions the child as a subject of policy; different from other children and adults who can be assumed to be capable of making rational choices.

Although our focus is not on the veracity of these claims it is nonetheless important to note how the process of translation enables the extensive use of neuroscience ‘facts’ that are controversial in wider literature (Harris 2010). There has been criticism from the original researcher that the Centre for Social Justice ‘greatly misrepresented’ and ‘distorted’ findings based on children who had suffered extreme neglect in applying them to children brought up in poverty (Lewis and Bosely 2010). In the CSJ reports the connection between early trauma and later outcomes is, nevertheless, repeated and emphasised through illustration; suggesting that it is less scientific veracity that policy makers seek than legitimised ‘knowledge’ that can be used in the articulation of a credible subject of policy and narrative construction.

It is thus the formation of a ‘new policy knowledge’ of neuroscience through processes of translation that is the condition of these articulations. In this translation, we have already seen that the work of think tanks plays a central role, as do reports from other boundary-spanning organisations, such as the Royal Society’s ‘Brainwaves’ project (Royal Society 2011). In translation, not only are debates and ambiguity within the scientific field elided, but we see this neurologically justified narrative begin to circulate as an element separate from the condition of its production. So, we see it stated as something like a policy principle that ‘Children’s future attainment, wellbeing, happiness and resilience are profoundly affected by the quality of their experiences during early childhood’ (DfE 2011).

Moreover, neuroscience is used not only to justify the identification of policy ‘problems’, but also to justify spending on those problems, on the basis of principles of economic efficiency<sup>1</sup>. This can be seen, literally, in the covers of two reports produced by the Early Intervention Review Team. The cover of the first of these reports (Allen 2011b, quoted above) shows two brains under the title ‘3 year old children’: one large brain, labelled ‘Normal’, and one smaller brain labelled ‘Extreme Neglect’ (Allen 2011b). An even more dramatic choice between early intervention and numerous social ills is presented in the second review report (Allen 2011a), which shows ‘Costs to taxpayer’ of the ‘normal’ brain as one gold bar labelled ‘Early Intervention’, in contrast to the ‘Severe neglect’ brain which is accompanied by a number of gold bars labelled ‘teen pregnancy’, ‘shorter life’, ‘violent crime’ and other social problems (Allen 2011a). The crudeness of this illustration belies the significance of its message to readers; the cover emphasises the potential risks of not investing in early intervention through a direct link between a smaller brain and negative social outcomes. In the text of the report, the risk is explained further in comments on the need for early assessment:

[Assessment] for each child at this stage in order to catch and pre-empt any dysfunction which, if left unattended, would potentially result in massive remedial expenditure throughout an individual’s lifetime. In this way, we can begin to put monetary values on the consequences of making or not making effective early interventions, which is the crucial task in achieving the massive savings on offer from the right investments in Early Intervention. (Allen 2011a, 16)



Here the insights from neuroscience lead logically to demands for early intervention as a cost-saving exercise: the 'massive savings on offer' can be discussed because of the definitive connections neuroscience has 'revealed' between early experience and later difficulties. A narrative of efficiency is re-inscribed by neuroscience which has a reassuring role in that it suggests money spent on early intervention projects will inevitably save money in the long term, because the brain and its manifestations in terms of behaviour are scientifically predictable.

This illustration of the neuroessentialist translation of neuroscience in one specific policy area demonstrates the interconnected effects of the articulation of a new knowledge. The construction of particular policy problems runs alongside the constitution of some children as different subjects of policy, while 'insights' are used to justify spending priorities. Through the use of neuroscience, policy makers are empowered to take action: to reduce expenditure; to intervene in the family; and to prevent the potential negative effects of the family environment.

While this illustration can be seen as based on the revised subject as biological, our second illustration, on network theory, can be seen as largely relational.

### Network theory

This illustration relates to the new knowledge of network theory, which, simply put, has been used to suggest that what others do has a strong influence over our individual choices, and seeks to understand that influence. Academic interest in social networks has exponentially increased over the last two decades, including in education (Daly 2012, 5). Meanwhile, within the UK context different agencies and think tanks have engaged in a series of translational policy moves that have social networks as a foundational principle, offering new insights on the subject of policy, economics and governance.

In a report of their Social Brain Project, the Royal Society of Arts (RSA) argues that 'our brains should be understood as extended and relational nervous systems, always functioning within social systems and utilising cultural tools' (Rowson 2011, 3), noting that the independent rational chooser who seeks to maximise profit is 'a very partial account of who we are' (Rowson 2011, 12). Arguing for the relevance of this line of thought to economics, Ormerod, writing for the think tank the Institute for Public Policy Research (IPPR), claims that 'network effects are a driving force of behaviour... [that] can have far greater influence on behaviour than incentives' (Ormerod 2012, 30). Dolphin and Nash, writing in the same IPPR collection argue that such a revision of economic theory has implications for the design of effective policy interventions:

the more knowledge we have of how people are connected on the relevant network, of who might influence whom and when, the more chance a policy has of succeeding. This means a move away from 'mechanistic' policy tool which 'tend to treat economic actors in isolation and are unable to anticipate "network effects" within the economic system' (Dolphin and Nash 2012, 11).

In this illustration we again see the constitution of the irrational subject as a new policy problem and of the social network as a new site of intervention. The social network is represented as an object of knowledge that allows the prediction and alteration of problematic 'network effects' through changing modes of governance. In seeking to 'alter the structure of existing networks' (Dolphin and Nash 2012, 11), it is argued the state assumes a revised role, becoming a 'relational state' (Cooke and Muir 2012, 7) rather than a 'delivery' focused service provider to individuals. The 'Troubled families' agenda illustrates the translation of network theory (among other things) within social and education policy and its influence.

### Troubled families

In the aftermath of the riots in England during the summer of 2011, social networks quickly came to be positioned as part of the explanation for the widespread nature of these social disturbances. Media reports from the time cited technologically enabled social networking processes – specifically the use of Blackberry Messenger – as a means of 'organisation' of the riots (The Economist 11/8/2011). Shortly after the events

the UK policy think tank the Institute for Government made explicit explanatory links between the spread of the riots and network effects:

Networks can magnify the effect of an initial change or offset it – they can make the effect of a policy much more unpredictable and less replicable – because the effects depend on what part of the network a policy ‘hits’. The recent London riots showed the importance of network effects: it was not the size of the initial disturbance which determined how far the disorder would spread, but the extent to which those involved were linked to others in different parts of the city. (Institute for Government 2011)

The availability of a notion of social networks as the significant enabling condition for widespread social disruption from seemingly small events reflects the fact that this is a field that increasingly has seen its ideas articulated within policy discourses.

The Riots, Communities and Victims panel was set up by the Coalition Government to investigate the unrest, and highlighted poor parenting as a root cause (The Guardian 2012). Lead by social intervention guru Louise Casey, the Troubled Families programme was subsequently positioned as a solution to the apparent epidemic dangers of unstable families, aimed at helping the 120,000 ‘troubled families’ in England. The government represented troubled families ‘as those experiencing problems including crime/anti-social behaviour, school exclusion or truancy and living on benefits’ (BBC News 2013). The discussion around the implementation of such a programme was also framed in financial terms, including the claim in a report by New Philanthropy Capital (van Poortvliet 2012, 2) that these families cost the taxpayer up to £9 billion per year. This meant that implementing an intensive intervention to ‘turn round every troubled family in the country’ could also potentially represent savings to the government. However, beyond the standard neoconservative emphasis on parenting, and the late neoliberal conception of the value of family in terms of return on investment, family is further (re)articulated as a network component.

Claims in the IPPR report that ‘it is real-life social networks – such as family, friends, colleagues... [that] shape our preferences and beliefs’ (Ormerod 2012, 29) are mirrored in the Troubled Families report (Casey 2012b, 2012a). In the latter, families are conceived as a nodal point within networks with the potential to alter the flow of influence and behaviour:

Families often seemed to stay close to former partners, members of their ex-partner’s families or people that they have had problems with. These extended networks of family and friends appeared to be very powerful influencers and were often detrimental forces – for example, reinforcing non co-operation with agencies, or their sense of being victims themselves and so on. (Casey 2012b, 2)

In this articulation of the Troubled Families programme we see the new knowledge of networks deployed to reconstitute the local scale in policy representations. Under New Labour, sociological conceptions of ‘social capital’ (Putnam 2000) were dominant in the representation of local social relations in the civic realm. Formulations of local social capital, that included family structures, social trust, and community engagement, as a largely unambiguous good (Performance and Innovation Unit 2002) provided impetus for area based regeneration policy programmes such as the ‘new deal for communities’ during the late 1990s and early 2000s (Lawless 2006). In the reformulation of the family as a network component, the individual policy subject in their limited rationality and self-knowledge becomes vulnerable to the negative influence of the network on their values and behaviour (which they further unwittingly transmit to those around them).

As a corollary, the social network is constituted as a site of policy intervention. Instead of a system of incentives or threats at the level of the individual as a means of governing behaviour, a network policy approach aims to penetrate networks, identifying and restoring to order cells that are sources of wider negative influence, and to changing flows of influence by understanding and reshaping network connections. Thus, in The Troubled Families Programme, we see described:

Extended family networks, traditionally viewed in society as positive influencers, in these cases tended to be characterised by instability and chaos, (Casey 2012b, 48, our emphasis)



Overall, the Troubled Families policies illustrate the significance of network theory in current policy-making as an intervention that, based on the sociality and connectivity of the subject, aims at shaping its environment as the main path towards social change.

### Well-being

Our final illustration relates to ‘well-being’, a term that has risen to prominence in UK politics particularly during the term of the Conservative-Liberal Democrat Coalition Government. This new knowledge most clearly relates to the field of ‘positive psychology’ identified with the work of Martin Seligman (2003). In common with our other illustrations ‘well-being’ has been subject to processes of translation within policy making contexts through the production of highly consumable texts by UK think-tanks and a prominent policy-oriented academic. This illustration focuses on the constitution of the subject’s relation to the self as a site of intervention, whereby the young person subject is articulated in terms of the abstracted measurement of emotional states and capacities that, with strong echoes of the logic of ‘smart investment’ seen elsewhere, have a statistical correlation with adult outcomes. As in other illustrations, this translation enables the construction of a justificatory narrative in policy, this time for the establishment of a market of ‘social investment’ in youth services.

In 2010, the Coalition Government commissioned the Office of National Statistics (ONS) to begin measuring levels of ‘well-being’ in the UK population, a move which is part of a minor transnational trend in Western policy making (Fox 2012; OECD 2011). In a speech announcing the new measure, Prime Minister David Cameron described it as an attempt to enable a ‘rational debate’ about what makes for a better society (Cameron 2010). Present at this speech, among other academics, was Lord Layard whose popular book *Happiness: Lessons from a New Science* (Layard 2011) argues for policy makers to utilise economic models that incorporate measures of subjective well-being or ‘happiness’.

A number of prominent UK policy think-tanks, including The Young Foundation, the New Economics Foundation and New Philanthropy Capital, have also made sustained efforts of translation, defining well-being, setting out its measurement, summarising existing research for policy makers, and arguing for its usefulness in policy-making. The New Economics Foundation (Stoll, Michaelson, and Seaford 2012) describe ‘happiness’ as combination of individual psychological capacities and subjective experience that are measurable (typically through self-reports of life-satisfaction undertaken through surveys) and thus quantifiable and comparable (Stoll, Michaelson, and Seaford 2012). In this same vein, The Young Foundation report *The State of Happiness* describes how such measurements can be applied within economic modelling and applied to policy implementation (Bacon et al. 2010). Indeed, much of the policy discourse on well-being is framed by the tenet that the creation of a measurement of subjective well-being marks a point where public policy can move from articulating improvement in well-being as a ‘broad and unfocused goal’ (Bacon et al. 2010) to more specific and targeted correlations and interventions. Allied to this development, is the production of a number of ‘tools’ and guides for the local measurement of wellbeing, including for youth service providers to assess the young people they work with and the impact of their intervention on wellbeing (Mguni and Bacon 2010; Michaelson, Mahony, and Schifferes 2012, New Philanthropy Capital 2012). These tools offer self-report surveys and data analysis techniques for the production of representations of the well-being of young people, and they have rapidly expanded in number in recent years (Harlock 2013).

In youth policy, the use of such tools has been articulated within a justificatory narrative for the introduction of new forms of ‘social investment’ (a notion that has also had rising prominence in policy discourse during the same period (Bovaird 2014)) in the youth services sector. Positive for Youth was the major statement of the Coalition Government’s youth policy, described as a ‘single plan’ drawn from the range of policy interventions across Government departments (HM Government 2011, Secretary of State Foreword). Having appeared several times in a series of consultation documents that preceded Positive for Youth in terms of the need for youth services, ‘positive subjective well-being’ is articulated in the full publication as part of a critique of the youth service sector’s ability to demonstrate impact and thus justify investment:

A long-standing weakness of out-of-school and college services for young people has been their limited ability to measure and demonstrate their impact. The Government is committed to supporting local commissioners and providers of services for young people to better understand and demonstrate the difference that services make in the lives of young people. (HM Government 2011, 83)

To this end the Coalition Government committed itself to funding a consortium of organisations called Catalyst that included the Young Foundation to:

develop a framework of outcomes for young people. It is hoped that this will become an ‘industry standard’ common language for the outcomes that services for young people are aiming to deliver... It will aim to develop greater awareness of the evidence that links a number of key personal capabilities (such as confidence and agency, or resilience and determination) to key longer-term outcomes such as those relating to educational attainment and employment. (HM Government 2011, 83–84)

The reference to confidence, agency, resilience and determination clearly cites the discourse of well-being, and later there is a commitment to ‘measuring success’ of youth services nationally in terms of, among other things, ‘a new national measure of young people’s wellbeing that will be recorded as part of the Measuring National Wellbeing Programme commissioned by the Prime Minister’ (HM Government 2011, 87). Catalyst was eventually succeeded in the sector by the Centre for Youth Impact, which brought together a range of ‘outcomes frameworks’ including that developed by Catalyst, alongside alternatives catalogues by the government’s Cabinet Office (The Centre for Youth Impact 2015).

It is notable in the quote immediately above that an ‘outcome’ does not simply describe a measurable difference to aspects of the personality of a young person that might be attributable to the adult intervention. Rather, it is specifically a difference that can be correlated with ‘longer-term outcomes’. With clear echoes of Allen’s report on early intervention policy cited above, though articulated through a different knowledge, the narrative of progress for youth services is constituted through the idea that through outcomes, youth services might reconstitute themselves as a site of ‘smart investment’. Positive for Youth makes clear that central government will not specify for local authorities the level or mix of funding of youth services but it argues local authorities should ‘prioritise early intervention for disadvantaged young people; and... avoid service reductions which may leave young people at risk of poor outcomes and drive up the costs of specialist services in future years’ (HM Government 2011, 74).

This illustration of policy demonstrates a significant shift in the figure of the young subject within neoliberal youth policy discourses. Under the Coalition Government, youth services have gone from being conceived as a service which supplies outputs to a vehicle for investment in young people’s outcomes. New Labour youth policy in the 2000s had made consistent representations of young people ‘as rational individual subjects with “voice” and “choice”’ (Bradbury, McGimpsey, and Santori 2013). The conception of outcomes in Positive for Youth figures the young person not as the rational choosing individual within a local service offer, indeed not as an individual at all, but as an abstracted measurement of emotional development, as a quantitative point in a statistical correlation with projected future outcomes. Such a quantitative point, produced through particular legitimated means, enables a value exchange within reconstituted monetary flows (payment by results, social impact bonds, and altered reporting arrangements with charitable funders) – in other words, the calculation of return on investment.

Local government administrations in England and Wales, apparently unpersuaded by the case for a return on investment, have reduced spending on services for young people significantly and at a rate faster than any other area of children and young people’s services (DfE 2014, 2015). The central government minister responsible described it as ‘disappointing that local [authorities] are making the choice to cut youth services’ while arguing that central government’s role was to promote the understanding of youth services’ value for money via impact on outcomes ‘through programmes such as the Centre for Youth Impact’ (Offord 2015).

This articulation of the new knowledge of well-being in turn sees youth services as refocused on this policy problem of the young person's relation to themselves – their sense of optimism, their sense of agency, and their satisfaction with themselves, peers, and institutions. Young people are reconstituted as a particular policy problem, the problem of measurements that do not correlate with indicators of satisfactory adult outcomes. The figure of the rational, choosing young person is transmuted into a statistical risk factor in the production of future costs to the state. Youth services, through related technologies of funding and impact measurement, are reregulated as a technology of intervention, measurement and evaluation with respect to the emotional lives of young people, and which subject young people (in the particular sense of subjectivation) to the regulatory norms of well-being.

### The rational subject as object of a new knowledge

Each of these illustrations is a specific translation involving a distinct 'new knowledge' within education and youth policy, specific articulations of education policy subjects, and enabling particular interventions with their own narrative justifications. However, in working across these illustrations (and bearing in mind the further example of behavioural economics), a relatively common process of translation can be discerned and a common purpose at the level of political strategy. These are not multiple examples of the same revision of the rational subject of neoliberal policy. Nevertheless each is an adaptation of the subjectivating force of policy that serves to maintain the legitimacy and control of the neoliberal policy regime. Such adaptability is recognised as an historic feature of (neo)liberalism (Ong 2006; Peck 2010), and is a particularly important critical focus in the emergence of the 'late neoliberal' phase of policy making that has followed of the economic crisis of 2008 (McGimpsey 2016).

The processes of translation by which new knowledges are produced in policy contexts are complex, incorporating discursive elements, networks of people and organisations, and the material production of highly consumable texts, books, events and talks. These translations are effective in diverse areas of education and youth policy, illustrated here through early years, family services and youth services.

Translation is more than a series of examples, however. Each illustration involves a revision of the rational subject of policy, with each particular irrationality constitutive of sites of policy intervention. In the illustration of neuroscience, the private familial domain has become the determinant of the neurological development of the child. Parental care and the parents' skills, knowledge, employment status are a reconstituted site of intervention in the biological development of the child's brain on this basis. Network theory is used to constitute particular nodes – troubled families – as sites of the production and spread of bad outcomes, beliefs and values throughout identified communities through relational connections. With respect to well-being, the psychological capacities and self-perceptions of subjects are constituted as the site of intervention by education and welfare services. Each such site delineates a limit to the subject's rationality that can and should be acted upon, in turn implying the development and application of particular technologies of governance. These new knowledges constitute new governmental possibilities, and collectively alter the subjectivating force of education and youth policy discourse.

The systematic discursive formation of irrational subjects of policy through translations of new knowledges is, we argue, a feature of education and youth policy making at this time. And by 'this time' we mean to suggest that it is significant that these translations follow the financial crisis of 2008, after which policy-making in post-industrial nations have undergone a thematic 'change of emphasis' (Ball 2012, 95). Translation and its relation to the articulation of the subject of policy occurs in the aftermath of the traumatic exposure of the contradictions of neoliberalism in the financial crisis and subsequent fiscal austerity, which has required significant policy discursive work (among other things) to restore legitimacy (Clarke and Newman 2012).

As such, whether translations affect the family, the social network, or individual psychology, they do not signify a move from a rational subject of policy to a particular irrational one, but figure a multiplicity of irrational subjects of policy, indeed a multiply irrational subject of policy, that functions to explain a series of persistent social and economic problems, constitute sites of state intervention, and justify the combination of laissez-faire market approaches with authoritarian centralisation. As such, new knowledges

of the irrational subject do not directly challenge and supplant a liberal orthodoxy of the rational subject. This multiplicity of subjects is productive in conjunction with neoliberal orthodoxies. The effect is less an oppositional confrontation, and more a diversification: different narratives become possible, different regulatory technologies are developed and deployed, and there are methodological shifts in education and youth policy making as economic theory is adjusted to incorporate a range of new assumptions about human nature and their individual choosing behaviours.

The essentialism of classical economics that neoliberalism subsequently utilised in its strategies of governance and subjectivation is not giving way to an alternative subject. However, repeated translations of new knowledges produce the effect of a modulation, a plasticity; that is to say, to a tropic process of moulding the subject into the shape of policy problems.<sup>2</sup> As we have noted throughout this article, and following in the education policy sociological tradition, policy discourse is bound up in processes subjectivation, of constituting the subjects it addresses (Ball 2006b). Thus a change in the terms by which policy discourse addresses the subjects of policy entails a modification in its force of subjectivation. And if the cumulative effect of a process of multiple translations of new knowledges is a certain plasticity, then perhaps we might refer to a 'plastic subject' not to denote a specific subject as the alternative to the rational subject of neoliberalism, but as a quality of policy subjectivation at this time.

### Conclusion – the plastic subject of late neoliberal policy

This paper has explored the translation of knowledges from emerging scientific fields within education and youth policy. These translations are, we argue, inevitably linked to the representations of policy subjects, and as such to alterations to the productive, subjectivating force of policy. And we suggest that such an alteration, which diversifies the subject of policy as a site of governance, intervention and control may be no coincidence in the aftermath of financial crisis. The financial crisis and the aftermath of 'austerity' have seen an authoritarian reassertion of the neoliberal regime, which inevitably exposes troubling (for power) contradictions. The individual of 'liberal paternalism' who must be 'nudged' to make good choices rather than left to their own flawed decisions (Bradbury, McGimpsey, and Santori 2013); the child and parents must be the site of intervention or they will be fundamentally damaged in neurological terms; the 'troubled family' must be managed to reduce their impact on others in their network; and the young person must be numerically evaluated in terms of well-being – each entails a fusion of knowledge and policy making that is indicative of an intensified governing need for a simultaneity of centralised control and the (neoliberal) cultural legitimacy of individualised autonomy and responsibility.

Thus both rationality and irrationality co-exist in translational policy texts, which tend to emphasise improving existing policy-making. This argument coheres with long-standing discussions of the endurance of neoliberalism as a regulatory regime being contingent on its ability to mutate (Ong 2006). As Peck puts it, 'as far as neoliberalism "survives", it does so through continued mongrelisation' (Peck 2010, 24), a plurality underpinned by 'practices of de- and re-articulation' and appropriation (Clarke 2008, 139).

There remains a question of the significance of these changes, and what they say about neoliberal governance following the financial crisis. At one level, these translations involve revision to the policy tools deployed, the sites of intervention, the roles policy-makers play, policy networks, and the constitutive force of policy brought to bear on those subjects policy addresses. At another level, there is a further question as to whether these translations collectively entail a more fundamental change to policy-making. Is this diversity and flexibility a characteristic of a wider change?

In recent years there have been academic discussions emphasising relatively radical discontinuity from neoliberalism. Some discussions of 'post-neoliberalism' have centred on optimistic analyses of an era 'after neoliberalism' emerging from the mid-90s, for instance in Latin America (Grugel and Riggirozzi 2012; Macdonald and Rückert 2009). In post-industrial nations, the financial crash sparked discussion of a 'crisis of neoliberalism' in the 2000s (Brand and Sekler 2009; Peck, Theodore, and Brenner 2010). Our analysis works instead in a tradition of education policy scholarship that recognises change as characteristic of the neoliberal regime (Doherty 2015), or what Peck et al call the 'necessary incompleteness of neoliberalism' (2010). It makes sense from this perspective to recognise a change of 'phase' (McGimpsey 2016) of policy

making as part of the survival strategy of neoliberalism during the post-crash era when legitimacy is threatened much that seemed certain is in flux. One effect of that flux felt in education and young policy may be the modification of policy discourse through successive translations of new knowledges; a modification that in turn shapes the subjectivating force of policy, producing a more plastic subject where the rational subject had once seemed so solid.

## Notes

1. It is of course the case that we illustrate just one policy take-up of neuroscience here. Even within Early Years policy, there is evidence of the previous Labour administration undertaking similar articulations (for example DCSF 2010).
2. This metaphor of plasticity is, indeed, itself an emerging trope of interdisciplinary, flexible policy production. Taking up the language of 'neuroplasticity' as one of the most influential recent discoveries of neuroscience, the RSA's report *Transforming Behaviour Change: Beyond Nudge and Neuromania* (Rowson 2011) synthesises research from across a wide range of disciplines, arguing that in contrast to classical economics and biological interpretations, we must understand that the productive effects of social contexts on cognition and consciousness are fundamental to 'the emerging scientific view of human nature' (Rowson 2011, 10).

## Disclosure statement

No potential conflict of interest was reported by the authors.

## References

- Allen, Graham. 2011a. *Early Intervention: Smart Investment, Massive Savings*. London: HM Government.
- Allen, Graham. 2011b. *Early Intervention: The Next Steps*. London: HM Government.
- Allen, Graham, and Iain Duncan Smith. 2008. *Early Intervention: Good Parents, Great Kids, Better Citizens*. London: Centre for Social Justice and Smith Institute.
- Bacon, Nicola, Marcia Brophy, Nina Mguni, Geoff Mulgan, and Anna Shandro. 2010. *The State of Happiness: Can public policy shape people's wellbeing and resilience?* London: The Young Foundation.
- Ball, Stephen J. 2006a. *Education Policy and Social Class: The Selected Works of Stephen J. Ball*. London: Routledge.
- Ball, Stephen J. 2006b. "What is policy? Texts, trajectories and toolboxes." In *Education Policy and Social Class: The Selected Works of Stephen J. Ball*. London: Routledge.
- Ball, Stephen J., Meg Maguire, Annette Braun, and Kate Hoskins. 2011. "Policy subjects and policy actors in schools: some necessary but insufficient analyses." *Discourse Studies in the Cultural Politics of Education* no. 32 (4):611-624.
- BBC News. *Troubled families scheme for England 'working'* 4/03/2013. Available from <http://www.bbc.co.uk/news/uk-21651502>.
- Blaise, Mindy. 2005. *Playing it straight: uncovering gender discourses in the early childhood classroom*. London: Routledge.
- Bovaird, Tony. 2014. "Attributing Outcomes to Social Policy Interventions – 'Gold Standard' or 'Fool's Gold' in Public Policy and Management?" *Social Policy & Administration* no. 48 (1):1-23.
- Bowe, Richard, Stephen J. Ball, and Anne Gold. 1992. *Reforming education and changing schools: Case Studies in Policy Sociology*. London: Routledge.
- Bradbury, Alice. 2011. "Equity, Ethnicity and the hidden dangers of 'contextual' measures of school success." *Race, Ethnicity and Education* no. 14 (3):277-291.
- Bradbury, Alice. 2013. *Understanding Early Years Inequality: policy, assessment and young children's identities*. London: Routledge.
- Bradbury, Alice, Ian McGimpsey, and Diego Santori. 2013. "Revising rationality: the use of 'Nudge' approaches in neoliberal education policy." *Journal of Education Policy* no. 28 (2):247-267.
- Brand, Ulrich, and Nicola Sekler. 2009. "Postneoliberalism: catch-all word or valuable analytical and political concept? – Aims of a beginning debate." *Development Dialogue* no. 51:5-13.



- Braun, Annette, Meg Maguire, and Stephen J. Ball. 2010. "Policy enactments in the UK secondary school: examining policy, practice and school positioning." *Journal of Education Policy* no. 25 (4):547-560.
- Burgess, Simon. *Message from the Director*. University of Bristol, February 2012 [cited 30 May 2012]. Available from <http://www.bristol.ac.uk/cubec/digest/digestfeb12.pdf>.
- Cameron, David. 2013. *PM Speech on Wellbeing*. [www.number10.gov.uk](http://www.number10.gov.uk), 25 November 2010 [cited 18 February 2013]. Available from <http://www.number10.gov.uk/news/pm-speech-on-well-being/>.
- Casey, L. . 2012a. *Working with Troubled Families*. London: Department for Communities and Local Government.
- Casey, Louise 2012b. *Listening to Troubled Families*. London: Department for Communities and Local Government.
- Clarke, John. 2008. "Living with/in and without neo-liberalism." *Focaal* no. 2008 (51):135-147. doi: 10.3167/fcl.2008.510110.
- Clarke, John, and Janet Newman. 2012. "The alchemy of austerity." *Critical Social Policy* no. 32 (3):299-319.
- Cooke, Graeme, and Rick Muir. 2012. "The possibilities and politics of the relational state." In *The Relational State: how recognising the importance of human relations could revolutionise the role of the state*, edited by Graeme Cooke and Rick Muir. London: IPPR.
- Cromby, John, and Martin E. H. Willis. 2014. "Nudging into subjectification: Governmentality and psychometrics." *Critical Social Policy* no. 34 (2):241-259. doi: 10.1177/0261018313500868.
- CSJ. *No excuses: a report on educational exclusion*. Centre for Social Justice 2011 [cited 30 July 2013]. Available from [http://www.centreforsocialjustice.org.uk/UserStorage/pdf/Pdf%20reports/CSJ\\_Educational\\_Exclusion.pdf](http://www.centreforsocialjustice.org.uk/UserStorage/pdf/Pdf%20reports/CSJ_Educational_Exclusion.pdf).
- Dahlberg, Gunilla, and Peter Moss. 2005. *Ethics and politics in early childhood education, Contesting early childhood series*. London: RoutledgeFalmer.
- Daly, Alan, ed. 2012. *Social Network Theory and Educational Change*. Cambridge: Harvard Education Press.
- DfE. 2011. *Reforming the Early Years Foundation Stage (EYFS): Government response to consultation*. London: Department for Education.
- DfE. *Types of School* 2013 [cited 30 July 2013]. Available from <http://www.education.gov.uk/schools/leadership/typesofschools>.
- Doherty, Catherine. 2015. "Tracking the neoliberal juggernaut: a virtual edition." *Critical Studies in Education*:1-7.
- Dolphin, Tony, and David Nash, eds. 2012. *Complex new world: translating new economic thinking into public policy*. London: IPPR.
- Fox, Justin. 2013. *The economics of well-being*. Harvard Business Publishing 2012 [cited 29 October 2013]. Available from <http://hbr.org/2012/01/the-economics-of-well-being>.
- Goswami, Usha. 2006. "Neuroscience and education: from research to practice?" *Nature Reviews: Neuroscience* no. 7:406-413.
- Grek, Sotiria. 2013. "Expert moves: international comparative testing and the rise of expertocracy." *Journal of Education Policy* no. 28 (5):695-709.
- Grugel, Jean, and Pía Riggirozzi. 2012. "Post-neoliberalism in Latin America: Rebuilding and Reclaiming the State after Crisis." *Development and Change* no. 43 (1):1-21. doi: 10.1111/j.1467-7660.2011.01746.x.
- Harris, Bernard. 2010. "Voluntary action and the state in historical perspective." *Voluntary Sector Review* no. 1 (1):25-40.
- Harvey, David. 2005. *A Brief History of Neoliberalism*. Oxford: Oxford University Press.
- HM Government. 2011. *Positive for Youth: A new approach to cross-government policy for young people aged 13 to 19*. edited by HM Government. London: HM Government.



- Institute for Government. *Cutting Edge Policy - Understanding System Stewardship* 2011. Available from <http://www.instituteforgovernment.org.uk/events/cutting-edge-policy-understanding-system-stewardship-0>.
- Ishkanian, Armine. 2014. "Neoliberalism and Violence: The Big Society and the changing politics of domestic violence in England." *Critical Social Policy* no. 34 (3):333-353.
- Layard, Richard. 2011. *Happiness: Lessons from a new Science*. Second ed. London: Penguin.
- Lewis, Paul, and Sarah Bosely. *Iain Duncan Smith 'distorted' research on childhood neglect and brain size*, *The Guardian* 2010 [cited 31 January 2013. Available from <http://www.guardian.co.uk/politics/2010/apr/09/iain-duncan-smith-childrens-brains>.
- Macdonald, Laura , and Arne Rückert. 2009. *Post-neoliberalism in the Americas*. New York: Palgrave Macmillan.
- Maguire, Meg, Stephen J. Ball, and Annette Braun. 2010. "Behaviour, classroom management and student control: enacting policy in the English secondary school." *International Studies in Sociology of Education* no. 20 (2):153-170.
- McGimpsey, Ian. 2013. *Youth service assemblage: youth work subjectivity and practice in the context of changing youth policy*, Humanities and Social Science, Institute of Education, London.
- McGimpsey, Ian. forthcoming. "Late neoliberalism: delineating a policy regime." *Critical Social Policy*.
- Mguni, Nina , and Nicola Bacon. 2010. Taking the temperature of local communities: The Wellbeing and Resilience Measure (WARM). London: The Young Foundation.
- Michaelson, Juliet , SORCHA Mahony, and Jonathan Schifferes. 2012. *Measuring Well-being: A guide for practitioners*. London: New Economics Foundation.
- New Philanthropy Capital. 2012. *Well-being Measure*. New Philanthropy Capital 2012 [cited 12 September 2012 2012]. Available from <http://www.well-beingmeasure.com/>.
- OECD. 2008. *Understanding the Brain: the Birth of a Learning Science*. OECD.
- OECD. 2011. *How's Life? Measuring Well-being*. Paris: OECD
- Olssen, Mark. 1996. "In defence of the welfare state and publicly provided education: a New Zealand perspective." *Journal of Education Policy* no. 11 (3):337-362.
- Ong, A. 2006. *Neoliberalism As Exception: Mutations in Citizenship And Sovereignty*. Durham: Duke University Press.
- Ormerod, Paul. 2012. "Networks and the need for a new approach to policymaking." In *Complex New World: Translating new economic thinking into public policy*, edited by Tony Dolphin and David Nash. London: IPPR.
- Peck, J. 2010. *Constructions of Neoliberal Reason*. New York: Oxford University Press.
- Peck, Jamie, Nik Theodore, and Neil Brenner. 2010. "Postneoliberalism and its Malcontents." *Antipode* no. 41:94-116. doi: 10.1111/j.1467-8330.2009.00718.x.
- Riddell, Richard. 2013. "Changing policy levers under the neoliberal state: realising coalition policy on education and social mobility." *Journal of Education Policy* no. 28 (6):847-863.
- Rose, Hilary, and Steven Rose. 2012. *Genes, cells and brains: Bioscience's Promethean Promises*. London: Verso.
- Rose, Nikolas. 2013. "The Human Sciences in a Biological Age." *Theory Culture & Society* no. 30 (1):3-34.
- Rowson, Jonathan. 2011. *Transforming Behaviour Change: Beyond nudge and neuromania*. London: RSA.
- Royal Society. 2011. *Neuroscience: implications for education and lifelong learning*. London: Royal Society.
- Seligman, Martin E. P. . 2003. *Authentic Happiness: using the new positive psychology to realize your potential for deep fulfillment*. London: Nicholas Brealey.
- Stoll, Laura , Juliet Michaelson, and Charles Seaford. 2012. *Well-being evidence for policy: A review*. London: The New Economics Foundation.
- Tamboukou, Maria. 2003. "Interrogating the 'emotional turn': making connections with Foucault and Deleuze." *European Journal of Psychotherapy and Counselling* no. 6 (3):209-223.

- Thaler, R. H., and C. R. Sunstein. 2009. *Nudge: improving decisions about health, wealth and happiness*: Penguin.
- The Centre for Youth Impact. 2015. *Outcomes Frameworks*. The Centre for Youth Impact, 2015 [cited 24 July 2015 2015]. Available from <http://youthimpact.uk/resources-hub/resource-type/outcomes-frameworks>.
- The Economist. *The BlackBerry riots* 11/08/2011 [cited 22/07/2013. Available from <http://www.economist.com/node/21525976>.
- The Guardian. *Early intervention is key to supporting troubled families. 120,000 families cost society around £9bn per year – but we should provide services early before problems are entrenched* 3/05/2012. Available from <http://www.guardian.co.uk/social-care-network/2012/may/03/early-intervention-troubled-families-uk-riots/print>.
- van Poortvliet, Matthew. 2012. *Out of trouble: Families with complex problems*. London: New Philanthropy Capital.
- Wagner, Antonin 2000. "Reframing "Social Origins" Theory: The Structural Transformation of the Public Sphere." *Nonprofit and voluntary sector quarterly* no. 29 (4):541-553.
- Yelland, Nicola. 2008. *Rethinking learning in early childhood education*. Maidenhead: Open University Press.
- Youdell, Deborah. 2006. *Impossible Bodies, Impossible Selves: Exclusions and Student Subjectivities*. Edited by Marcia Rioux Len Barton, *Inclusive Education: Cross Cultural Perspectives*. Dordrecht: Springer.